ABSTRACT OF THE DISCLOSURE

A join process is disclosed for a wireless mesh topology network. In the network, nodes have multiple spatial coverage sub-sectors together covering a larger sector angle and a node can establish connection with other nodes located in directions covered by its sub-sectors. The join process adds a joining node to the network and includes having the joining node listen to sub-sectors at a specific receiving frequency for a defined time. Thereafter, the network node changes its sub sectors and its receiving frequencies according to a defined timing and sequence. Active network nodes transmit organized invitation data packets on defined sectors, frequencies and timing, based on relative location and relative angle orientation deduced from sub-sectors already in use for existing internal network communication. This reduces frequency interference in the network and reduces time required for the join process.